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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,808	10/30/2003	Paul H. Sanderson	SANP-0018DIV1	1329

20558 7590 05/14/2004

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PLANO, TX 75074

EXAMINER

CHAMBERS, TROY

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/696,808	SANDERSON, PAUL H.	
	Examiner	Art Unit	
	Troy Chambers	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-31 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group IV claims 26-32 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Objections***

2. Claim 26 is objected to because of the following informalities:

- "than" (line 4), should be "than";
- "machine gun" (line 6) should be preceded by "a";
- "elevation limiting structure" (line 9) should be preceded "an".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The instant application is a division of U.S. Application number 10/262048 filed 10/01/2002. Hence, any determination of anticipation or non-obviousness will be based on this date.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 6250197 issued to Sanderson. Sanderson discloses an armament apparatus 50 for an aircraft 10.

6. With respect to claim 26, Sanderson discloses a landing gear structure 44; an elongate arm 52 having a lower end and an upper end, said lower end anchored to said landing gear structure via block assembly 86; a rotatable machine gun support structure (Figs. 1-5); and an elevation limiting structure to variably limit the available elevation rotation of said machine gun support structure in response to azimuth rotation thereof (see, col. 18, ll. 19-41; the structure of the gun provides for an inclination of the vertical machine gun axis so that when the gun is moved from its 90 degree azimuth to its rearward position its upward inclination changes automatically from 4.5 degrees to 7.5 degrees.)

7. With respect to claim 27, Sanderson discloses a tow plate 46 and said lower end of said support arm is anchored to said tow plate via post structure 120.

8. With respect to claim 28, Sanderson discloses a aircraft comprising a helicopter.

9. With respect to claim 29, Sanderson discloses a machine gun support structure pivotable through an arc having first and second portions (any length of the arc created by the azimuth swing can be considered a different portion, especially in view of the change of the firing axis of the gun); said elevation limiting structure is operative to provide different available elevation arcs for said machine gun structure in each of said first and second azimuth arc portions (as the gun is azimuthally rotated the firing axis gradually changes to a higher or lower position depending on the direction of rotation).

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10. With respect to claim 30, as the elevation of the firing axis of gun changes so do the downward rotational limit.

11. With respect to claim 31, Sanderson discloses a cradle assembly 56 and a yoke assembly 54 underlying, secured to and pivotable relative to said cradle assembly 56, a vertical post structure 154 (Fig. 10) secured to said upper end of said support arm 124 and having horizontal azimuth stop plate portion 166, said yoke assembly 54 being secured to said post structure 154 via the arm and post structure 120; and, an elevation limiting member carried by said yoke assembly for vertical movement relative thereto, in response to rotation of said yoke assembly about said generally vertical axis, between said first and second positions in which said elevation limiting member variably blocks downward pivotal movement of said yoke assembly (see col. 17, ll. 26-33 and Fig. 8; as the assembly rotates around the inclination, the position of the cradle and yoke will necessarily change with it and so would the lower limit of the machine gun).

#### ***Allowable Subject Matter***

12. Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited on form PTO-892 are cited as of interest to show similar aircraft armament structures.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER